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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/573,873 | 03/29/2006 | Richard Thomas Entwistle | 6495-0155WOUS | 7090 |

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| EXAMINER |
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FRISTOE JR, JOHN K

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| ART UNIT | PAPER NUMBER |
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3753

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03/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------------|---|--|
| Office Action Summary | Application No. 10/573,873 | Applicant(s) ENTWISTLE ET AL. | |
| | Examiner JOHN K. FRISTOE JR | Art Unit 3753 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/29/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 3/29/2006 is acknowledged by the examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. M There is no antecedent basis for “the pipe” in claim 8 line 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 9, and 10 as well as 8 as far as it is definite rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,687,759 (Tan). Tan discloses a valve arrangement comprising an inlet connection (14), an outlet connection (16), a flow path (24), a closing device (60, 22), a valve seat (22), a valve element (60), a resetting device (66), a first pressure chamber (26), a second pressure chamber (32), a channel arrangement (56, 58), at least one auxiliary valve (82), a throttle (48), a suction nozzle arrangement (36, 38, 40), at least one suction nozzle (38), bordering wall (36), wherein the suction nozzle arrangement (36, 38, 40) blocks (at least

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partially) into the channel (56, 58), wherein the suction nozzle arrangement (36, 38, 40) is connected to the housing (12) in at least two positions (near the upper portion of element 38 and near the lower portion of element 38), , a body (38), a pilot valve seat (upper surface of element 38), a pipe (36), an annular nozzle (inside surface of element 38), and a reduced (threaded section near the end of element 16 has an increased cross section) cross section (16).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,687,759 (Tan) in view of U.S. Pat. No. 4,025,045 (Kubiak). Tan discloses a valve arrangement comprising an inlet connection (14), an outlet connection (16), a flow path (24), a closing device (60, 22), a valve seat (22), a valve element (60), a resetting device (66), a first pressure chamber (26), a second pressure chamber (32), a channel arrangement (56, 58), at least one auxiliary valve (82), a throttle (48), a suction nozzle arrangement (36, 38, 40), at least one suction nozzle (38), bordering wall (36), wherein the suction nozzle arrangement (36, 38, 40) blocks (at least partially) into the channel (56, 58), wherein the suction nozzle arrangement (36, 38, 40) is connected to the housing (12) in at least two positions (near the upper portion of element 38 and near the lower portion of element 38), , a body (38), a pilot valve seat (upper surface of element 38), a pipe (36), an annular nozzle (inside surface of element 38), a front side channel (56), and a reduced (threaded section near the end of element 16 has an increased cross

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section) cross section (16) but lacks the pipe having a slot. Kubiak teaches a nozzle arrangement comprising a nozzle member (21) with a slot. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the valve arrangement of Tan by manufacturing the nozzle with a slot as taught by Kubiak in order to decrease the possibility of fluid being through the nozzle in the reverse direction.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 5,213,303 (Walker) discloses a pilot valve.

U.S. Pat. NO. 4,505,450 (Saarem et al.) disclose a pilot valve.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Fristoe Jr. whose telephone number is (571) 272-4926. The examiner can normally be reached on Monday-Friday, 7: 00 a.m-4: 30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory L. Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John K. Fristoe Jr./
John K. Fristoe Jr.
Examiner
Art Unit 3753

JKF